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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|----------------------------|-------------------------|---------------------|------------------|
| 10/748,698 | 12/29/2003 | Jyrki Mikkola | 01329/0200613-US0 | 2127 |
| 7278 DARBY & DA | 7590 10/14/200 RBY P.C. | EXAMINER | | |
| P.O. BOX 770 | 4-4: | HOLLIDAY, JAIME MICHELE | | |
| Church Street S New York, NY | | ART UNIT | PAPER NUMBER | |
| | | | 2617 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 10/14/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | | |
|-------------------|----------------|--|--|
| 10/748,698 | MIKKOLA, JYRKI | | |
| Examiner | Art Unit | | |
| JAIME M. HOLLIDAY | 2617 | | |

| | JAIME M. HOLLIDAY | 2617 | |
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| The MAILING DATE of this communication appe | ars on the cover sheet with the c | orrespondence add | ress |
| THE REPLY FILED 24 September 2008 FAILS TO PLACE THIS | S APPLICATION IN CONDITION F | OR ALLOWANCE. | |
| 1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Appetor Continued Examination (RCE) in compliance with 37 C periods: | replies: (1) an amendment, affidavit al (with appeal fee) in compliance v | , or other evidence, w with 37 CFR 41.31; or | hich places the (3) a Request |
| a) The period for reply expiresmonths from the mailing b) The period for reply expires on: (1) the mailing date of this Ai no event, however, will the statutory period for reply expire la Examiner Note: If box 1 is checked, check either box (a) or (I MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f) | dvisory Action, or (2) the date set forth in ter than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE | date of the final rejection | n. |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date of have been filed is the date for purposes of determining the period of extunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the s set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL | on which the petition under 37 CFR 1.13 ension and the corresponding amount on the tened statutory period for reply origin | of the fee. The appropria nally set in the final Offic | ate extension fee e action; or (2) as |
| 2. The Notice of Appeal was filed on A brief in complifiling the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed wi | sion thereof (37 CFR 41.37(e)), to | avoid dismissal of the | |
| 3. The proposed amendment(s) filed after a final rejection, be a considered after a final rejection and a considered after a final | nsideration and/or search (see NOT w); er form for appeal by materially rec | E below); lucing or simplifying th | |
| (d) ☐ They present additional claims without canceling a converse NOTE: (See 37 CFR 1.116 and 41.33(a)). 4. ☐ The amendments are not in compliance with 37 CFR 1.12 5. ☐ Applicant's reply has overcome the following rejection(s): 6. ☐ Newly proposed or amended claim(s) would be allowed. | 11. See attached Notice of Non-Cor | mpliant Amendment (I | • |
| non-allowable claim(s). 7. For purposes of appeal, the proposed amendment(s): a) [how the new or amended claims would be rejected is prov The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: Claim(s) withdrawn from consideration: | | be entered and an ex | xplanation of |
| AFFIDAVIT OR OTHER EVIDENCE | | | |
| The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e). | sufficient reasons why the affidavi | t or other evidence is | necessary and |
| 9. The affidavit or other evidence filed after the date of filing a entered because the affidavit or other evidence failed to or showing a good and sufficient reasons why it is necessary | vercome <u>all</u> rejections under appea | l and/or appellant fails | s to provide a |
| 10. The affidavit or other evidence is entered. An explanation | n of the status of the claims after er | itry is below or attach | ed. |
| REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but see below. | does NOT place the application in | condition for allowan | ce because: |
| 12. Note the attached Information <i>Disclosure Statement</i> (s). (13. Other: | PTO/SB/08) Paper No(s) | | |
| /VINCENT P. HARPER/ Supervisory Patent Examiner, Art Unit 2617 | | | |

Applicants basically argue that the Office Action conflated the antenna 411 with the smart structure 16. Further, Khorrami fails to disclose "wherein the periodic movement occurs in a substantial portion of the planar element beyond the location of the piezoelectric element." Also, Applicants argue that the Office Action equates the smart structure with the "planar element beloning to a radiating plane of an antenna in the radio telephone." Applicants further argue that the combination of Pankinaho and Khorrami would result in a plurality of minuscule radiators each having a piezoelectric element and diode fastened to the radiator of an antenna, wherein the RF-energy would be carried to those miniuscule radiators so as to actauate movement in a part of the radiator. Also, Applicants argue that the "footprint" of the planar element of the antenna in Khorrami is entirely within or equal to the "footprint" of the piezo electric elements. Applicants further argue that Mahringer fails to disclose "the piezoelectric element induces the periodic movement of a substanial portion of the planar element beyond the location of the piezoelectric element." because the membrane crease mechanically isolates the remainder of the radiating plane. Examiner respectfully disagrees, because the smart structure 16 of Khorrami inculeds micro-strip antennas 411 that causeing the structure to sense and actuate (move). The microstrip antenna is not larger than the piezoelectric layer, but the microstrip antennas are used as smart patches on a smart structure and are used to actuate the structure (planar element) [A sensing voltage, vs. is generated across the piezoelectric substrate due to a response of the structure (e.g., mechanical vibration of the structure) on which the sensing antenna is mounted.] (fig. 1, fig. 10, col. 7 lines 20-22). Further, the limitation of the "planar element belongs to a radiating plane of an antenna in the radio telephone," is taught by Pankinaho, and the Khorrami reference is incorporated to teach that there is a piezoelectric element attached to the planar antenna, and that the second function is periodic movement of the planar element. In response to applicant's argument that the combination of Pankinaho and Khorrami would result in a plurality of minuscule radiators each having a piezoelectric element and diode fastened to the radiator of an antenna, wherein the RF-energy would be carried to those miniuscule radiators so as to actauate movement in a part of the radiator, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). As for the Mahringer reference, Examiner maintains that the feature of "the piezoelectric element induces the periodic movement of a substantial portion of the planar element beyond the location of the piezoelectric element." Since "substantial" is a relative term that is defined by the claim as "beyond the location of the piezoelectric element," then the since the crease is beyond the piezoelectric element and vibrates, then the above mentioned limitation is taught. Therefore, in view of the preceding arguments, Examiner maintains previous rejection